



Resource Tool-kit

Quality Measure (QM) 403: High-risk residents with pressure ulcers



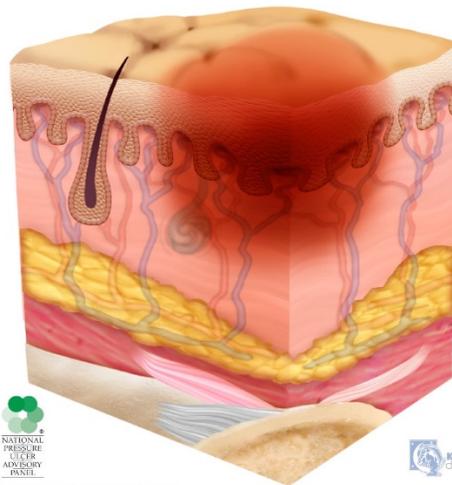
QM 403: High-risk residents with pressure ulcers:

Pressure ulcers, now known as pressure injuries¹, are localized damage to the skin and underlying soft tissue usually over a bony prominence or related to a medical or other device. The injury can present as either intact skin or an open ulcer and will often be very painful.

Pressure injuries can be classified by stages; 1 through 4, deep tissue injury (DTI) or unstageable, depending on the characteristics of the injury. Staging for pressure injuries is based on the following:

- **Stage 1:** Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.

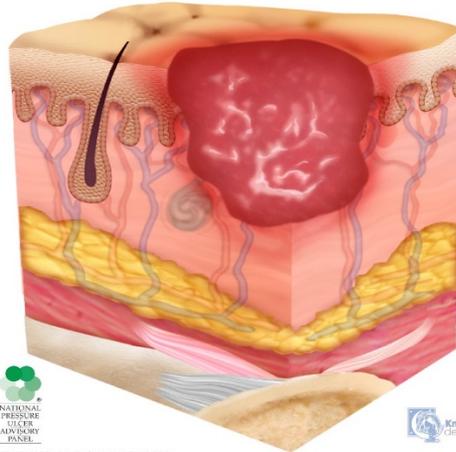
Stage 1 Pressure Injury – Edema



- **Stage 2:** Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARS), or traumatic wounds (skin tears, burns, abrasions).

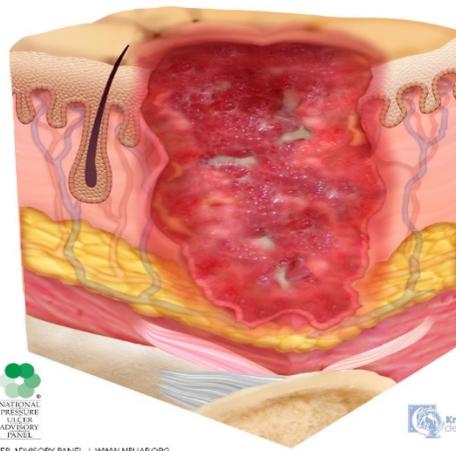
¹ National Pressure Ulcer Advisory Panel (NPUAP) Pressure Injury Stages. <http://www.npuap.org/resources/educational-and-clinical-resources/npuap-pressure-injury-stages/>

Stage 2 Pressure Injury



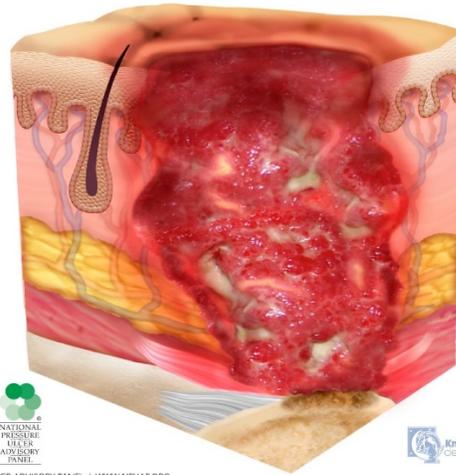
- **Stage 3:** Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury

Stage 3 Pressure Injury



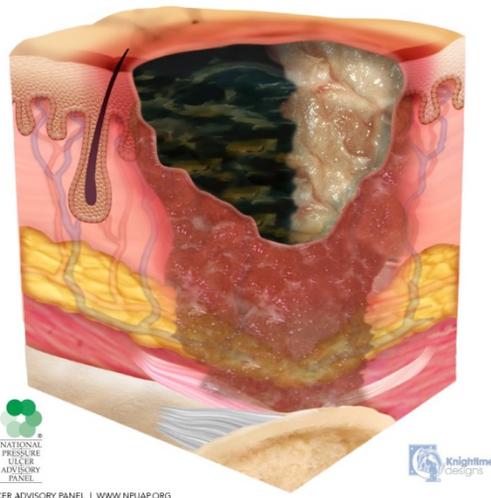
- **Stage 4:** Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

Stage 4 Pressure Injury



- **Unstageable:** Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, and intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.

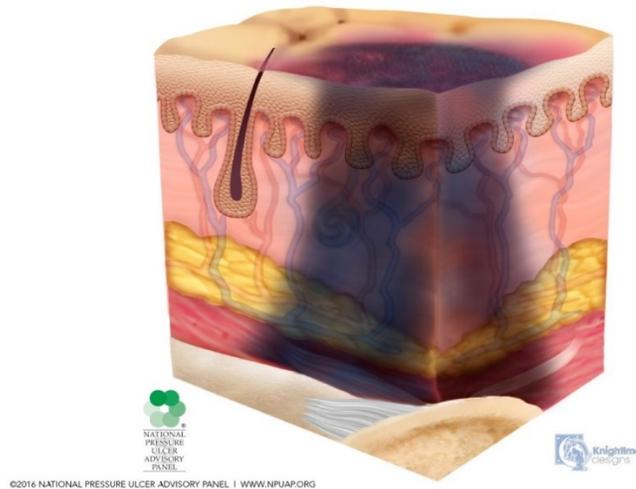
Unstageable Pressure Injury - Slough and Eschar



- **Deep Tissue Pressure Injury:** Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other

underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4).

Deep Tissue Pressure Injury



Pressure injuries can happen anywhere on the body, however, they are more common where there are bony areas, depending on the way in which the person is positioned. The common sites for pressure injuries include:

- Back of the head
- Shoulders
- Elbows
- Buttocks
- Ears
- Hips thighs
- Legs
- Heels
- Rib cage
- Knees
- Toes
- Base of the spine

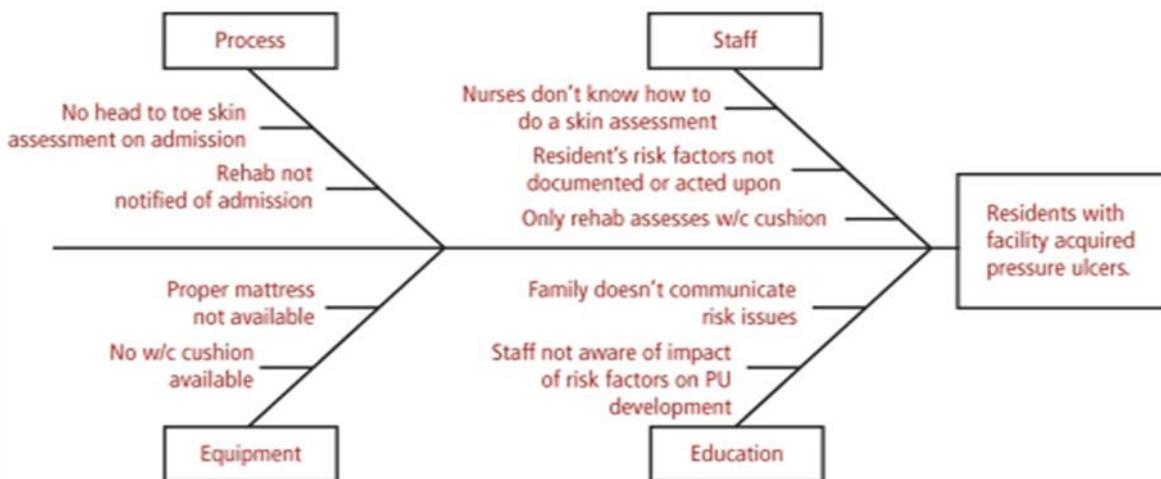
There are three main factors that may lead to the development of a pressure injury. Each of these factors may occur independently of the other two:

- Pressure: body weight can squash the skin and interrupt or block the blood supply to the area. This can lead to tissue damage.
- Shearing: when layers of the skin are pulled in opposite directions, for instance if you slip down the bed or your buttocks are dragged rather than lifted when transferring.
- Friction: when the surface of the skin rubs against a firm surface (often results in a water blister). This can be caused by severe spasm.

Pressure injury prevention is the job of everyone in the facility. Ensuring residents don't develop pressure injuries requires taking many things into consideration. In 2016, the National Pressure Ulcer Advisory Panel (NPUAP) released their pressure injury prevention points which include the following related to pressure injuries:

Root Cause Analysis:

The utilization of RCA process may help your facility gain insight into the development of a pressure injury through a review of the timeline of events. This process is not intended for the analysis of all pressure injuries in your facility but rather for review of the development of pressure injuries that happened after a resident was admitted. This review may also provide gap information indicating there may have been a deviation from the pressure injury policies and procedures that your facility has. It may provide an opportunity for improvement in the process of your facility's skin management program. It is important to remember that the RCA process is not intended as a punitive function but rather as a learning and growth opportunity for your staff. The fishbone process, also known as the cause and effect process, can be used to identify the many possible causes for a problem. Using this tool allows for ideas to be sorted into useful categories. Below is an example of this process for pressure injuries:



Once an RCA has been completed, it is important that processes are put in place to eliminate the root cause of the pressure injuries in your facility. This can best be accomplished through the use of the Evidence-Based Practice (EBP) information provided in this tool-kit.

Pressure Injury Assessment:

- RISK ASSESSMENT
 - Consider bedfast and chairfast individuals to be at risk for development of pressure injury.
 - Use a structured risk assessment, such as the Braden Scale, to identify individuals at risk for pressure injury as soon as possible (but within 8 hours after admission).
 - Refine the assessment by including these additional risk factors:
 - Fragile skin

- Existing pressure injury of any stage, including those ulcers that have healed or are closed
 - Impairments in blood flow to the extremities from vascular disease, diabetes or tobacco use
 - Pain in areas of the body exposed to pressure
- Repeat the risk assessment at regular intervals and with any change in condition. Base the frequency of regular assessments on acuity levels:
 - Long term care. . . Weekly for 4 weeks, then quarterly
- Develop a plan of care based on the areas of risk, rather than on the total risk assessment score. For example, if the risk stems from immobility, address turning, repositioning, and the support surface. If the risk is from malnutrition, address those problems.
- **SKIN CARE**
 - Inspect all of the skin upon admission as soon as possible (but within 8 hours).
 - Inspect the skin at least daily for signs of pressure injury, especially nonblanchable erythema.
 - Assess pressure points, such as the sacrum, coccyx, buttocks, heels, ischium, trochanters, elbows, and beneath medical devices.
 - When inspecting darkly pigmented skin, look for changes in skin tone, skin temperature and tissue consistency compared to adjacent skin. Moistening the skin assists in identifying changes in color.
 - Cleanse the skin promptly after episodes of incontinence.
 - Use skin cleansers that are pH balanced for the skin.
 - Use skin moisturizers daily on dry skin.
 - Avoid positioning an individual on an area of erythema or pressure injury.
- **NUTRITION**
 - Consider that some individuals may be at risk for under nutrition and malnutrition.
 - Use a valid and reliable screening tool to determine risk of malnutrition, such as the Mini Nutritional Assessment.
 - Refer all individuals at risk for pressure injury from malnutrition to a registered dietitian/nutritionist.
 - Assist the individual at mealtimes to increase oral intake.
 - Encourage all individuals at risk for pressure injury to consume adequate fluids and a balanced diet.
 - Assess weight changes over time.
 - Assess the adequacy of oral, enteral and parenteral intake.
 - Provide nutritional supplements between meals and with oral medications, unless contraindicated.
- **REPOSITIONING AND MOBILIZATION**
 - Turn and reposition all individuals at risk for pressure injury, unless contraindicated due to medical condition or medical treatments.
 - Choose a frequency for turning based on the support surface in use, the tolerance of skin for pressure and the individual's preferences.

- Consider lengthening the turning schedule during the night to allow for uninterrupted sleep.
- Turn the individual into a 30-degree side lying position, and use your hand to determine if the sacrum is off the bed
- Avoid positioning the individual on body areas with pressure injury.
- Ensure that the heels are free from the bed.
- Consider the level of immobility, exposure to shear, skin moisture, perfusion, body size and weight of the individual when choosing a support surface.
- Continue to reposition an individual when placed on any support surface.
- Use a breathable incontinence pad when using microclimate management surfaces.
- Use a pressure redistributing chair cushion for individuals sitting in chairs or wheelchairs.
- Reposition weak or immobile individuals in chairs hourly.
- If the individual cannot be moved or is positioned with the head of the bed elevated over 30°, place a polyurethane foam dressing on the sacrum.
- Use heel offloading devices or polyurethane foam dressings on individuals at high-risk for heel ulcers
- Place thin foam or breathable dressings under medical devices.
- EDUCATION
 - Teach the individual and family about risk for pressure injury
 - Engage individual and family in risk reduction interventions

Care planning for those individuals who have or are at risk for pressure injuries should be done immediately upon admission to the facility. Care plans should be reviewed at least quarterly, at significant change of condition, when a skin assessment has changed, and/or when a goal is not being met. Care plan revision may require a modification in the expected goals/outcomes and/or pharmacological and non-pharmacological multi-disciplinary approaches.

Problems/Needs	Goals/Outcomes	Interventions/Approaches	Team Members
Risk of developing a pressure injury ➤ Related to (baseline information, such as risk factor(s), validated tool score, etc.) Actual pressure injury ➤ as evidenced by [location, PUSH score, (length, width, stage,	Measurable & realistic ➤ specified date • pressure injury will not develop for those at risk • Pressure injury responded to treatment	Resident/responsible party education that includes: ➤ the individual's values/wishes ➤ identified risk factors ➤ treatment plan ➤ routine head-to-toe skin assessment • Timing/frequency of pressure injury risk assessments and/or re-evaluation of existing pressure injuries • Interventions focused on individual's pressure injury risk factors or in-depth pressure	• Specify department responsible for each approach • Periodic IDT review to evaluate the effectiveness of interventions related to achievement of the goals

exudate amount, tissue type) and any other descriptions] Date developed		injury assessment <ul style="list-style-type: none"> • Identify pressure injury prevention measures • Factors identified from the assessment process results in individualized interventions <ul style="list-style-type: none"> ➤ treatment ordered (medication, dressing, nutrition changes, support surface/s) and frequency ➤ communication between nursing staff, physician, and other disciplines • assess pain and current treatment, medicate before treatment • current physical status • Treatment re-evaluations for those without improvement within ___ weeks 	
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The development of a facility acquired pressure injury brings with it both a financial impact to an institution and a performance or quality of care impact that may be reportable.

The utilization of a Root Cause Analysis (RCA) process may help a facility gain insight into the development of a pressure injury through a review of the timeline of events. This process is not intended for the analysis of all facility acquired pressure injuries but rather for review of the development of a Stage III, Stage IV or DTI. This review may also provide gap information indicating there may have been a deviation from the facility’s Pressure Injury Prevention and Treatment Guidelines. It may provide an opportunity for improvement in the process of the facility’s skin management program. A Root Cause Analysis (RCA) is not intended as a punitive function but rather as a learning and growth opportunity for facility staff. The NPUAP has an RCA template available for use for this process at: <http://www.npuap.org/resources/educational-and-clinical-resources/pressure-ulcer-root-cause-analysis-rca-template/>.

Nursing Facility Staff Roles in Pressure Injury Reduction:

CNA Role: there are many things that the CNA can do to prevent pressure injuries in their residents. Below, in the table, you will find the things the CNA can do along with the rationale for doing them.

What to do	Why you do it
Reposition a person who must stay in bed or in a wheelchair at least every 2 hours, or according to the person’s care plan.	Regular repositioning prevents any one part of the person’s body from being under pressure for too long.

Take the bedpan out from underneath the person as soon as the person is finished using it.	The bedpan places pressure on the person's lower spine, one of the pressure points.
Check the resident's skin for changes at every opportunity, including when you are assisting with repositioning, bathing, and dressing and when you are changing wet or soiled linens or giving a back massage. Report red, pale, white, or shiny areas over pressure points right away.	Redness over a pressure point that does not go away after 5 minutes or an area over a pressure point that was previously red but now is pale, white, or shiny could be a sign of a stage 1 pressure injury. Early recognition and treatment of a pressure injury is important so that measures can be taken to prevent the pressure injury from getting worse.
Provide good skin care. When bathing a resident, clean the skin gently and thoroughly and rinse off the soap well. Make sure the skin is dried well and use lotion to keep the skin healthy and soft. Thoroughly clean and dry areas where skin touches skin, such as under the breasts, and apply a light dusting of powder to keep the skin dry.	Keeping the skin clean and dry is essential to preventing skin breakdown and pressure injury development.
Provide good perineal care, especially if the resident is incontinent of urine or feces.	Urine and feces are irritating to the skin and can lead to skin breakdown. Prompt, thorough perineal care keeps the skin clean and dry, which is essential to preventing skin breakdown and pressure injury development.
Assist the person to the bathroom (or provide a bedpan or urinal) frequently. Check on incontinent people every hour so.	Contact with wet and soiled clothing or linens can cause skin breakdown, leading to pressure injuries. Anticipating toileting needs helps to prevent patients and residents from soiling themselves. Checking on incontinent patients and residents frequently allows you to detect and change wet and soiled clothing or linens promptly.
Ask residents who can walk to take a walk with you every 2 hours. Remind residents to change positions in the wheelchair or move to the bed for a while.	Exercise and movement promote blood flow to the tissues and prevent the person from staying in any one position for too long a time.
Make sure the bed linens are clean, dry, and wrinkle free at all times.	Soiled, wet, or excessively wrinkled linens can lead to skin breakdown and pressure injuries.
Provide frequent back massage.	Back massage helps to stimulate blood flow to the skin and gives you a chance to check the person's skin for red, pale, white, or shiny areas.
Minimize skin injury caused by friction or shearing. Use lift devices and lift sheets when moving and repositioning people. Use devices	Friction and shearing forces damage the skin and underlying tissues and can put the person at risk for a pressure injury. Lift devices and

such as elbow pads and heel booties according to the person's care plan. Avoid raising the head of the bed more than 30 degrees.	lift sheets help reduce friction by allowing you to lift or roll, instead of dragging the person. Elbow pads and heel booties reduce friction by preventing the skin from rubbing against sheets and other surfaces. Raising the bed no more than 30 degrees helps prevent shearing, which occurs when the person slides down in the bed.
Offer refreshing drinks frequently. Encourage your residents to eat well.	Good nutrition and adequate fluid intake help to keep the skin healthy.
Use pressure-reducing devices according to the resident's care plan.	These devices help to distribute the person's body weight more evenly, preventing any one area from bearing most of the pressure.

Nursing's Role: Nurses have a role to play in monitoring the success of strategies to reduce avoidable pressure injuries and to provide accountability and maintain motivation. The nurse should be sure to conduct a resident assessment ensuring that the skin is thoroughly assessed. If it is determined that the resident is at risk for a pressure injury, then the nurse should ensure certain interventions are in the care plan, including:

- Turning and repositioning patient at least every 2 hours
- Maximal remobilization
- Protection of heels and other bony prominences (occiput, ears, scapula, spinous processes, shoulders, elbows, iliac crest, sacrum/coccyx, ischial tuberosity, trochanters, knees, malleous, and toes)
- Managing moisture, nutrition, friction, and shear (elevate head of bed no more than 30 degrees)
- Supportive measures for pressure reduction, if bed or chair bound
- Nutrition consult when resident's Braden score is 18 or less
- Specific turning and repositioning schedule
- Wedge devices for lateral positioning
- Pressure redistribution support surface
- Manage nutrition
- Increased frequency of turning, including small shifts of weight
- Very High (9 or below), mild, moderate, and high interventions
- Reassessment every shift

Prevention of pressure injuries in the nursing facility is vital to the health and well-being of the residents. Below are additional resources that may be accessed to assist you and your staff in the prevention of pressure injuries in your facility.

- Prevention Plus provides services and products related to the Braden Scale for Predicting Pressure Ulcer Risk and evidence-based programs for pressure injury prevention:
<http://bradenscale.com/>

- The Bates-Jensen Wound Assessment Tool (BWAT) is a validated and reliable tool for conducting in-depth evaluations of wound status. The BWAT is available on this website, along with concise instructions for using the tool:
http://www.geronet.med.ucla.edu/centers/borun/modules/Pressure_ulcer_prevention/puBWAT.pdfIndiana State Department of Health: Pressure Ulcer Resource Center offers information, tools, educational modules and other resources for pressure injury prevention and management: <http://www.in.gov/isdh/24558.htm>
- Resources for Reducing High-Risk Pressure Ulcers can assist nursing facilities with quality improvement activities, including pressure injury prevention. Note: You must complete a registration to access the resources on this website: <https://www.tmfqin.org/Resource-Center/Filtered-Results?fi=172&st=%22HR%20PUs%22>
- Advancing Excellence in America’s Nursing Homes is a national coalition, focusing on specific target areas, including pressure injuries, working to improve the quality of care and quality of life of nursing home residents:
<https://www.nhqualitycampaign.org/goalDetail.aspx?g=PU>
- Taking the Pressure Off – Preventing Pressure Ulcers (PDF) is a nursing best practice guideline from the Registered Nurses Association of Ontario: http://rnao.ca/sites/rnao-ca/files/Taking_the_Pressure_Off_-_Preventing_Pressure_Ulcers.pdfThe National Pressure Ulcer Advisory Panel (NPUAP) is a professional organization dedicated to the preventing and managing pressure injuries: <http://www.npuap.org/resources/>
- The PUSH Tool 3.0 is a validated and reliable tool that is used to collect data and monitor the healing of pressure injuries: <http://www.npuap.org/wp-content/uploads/2012/03/push3.pdf>